IN THE CLAIMS:

Please add claim 35, cancel claims 4, 5, 8 and 27, and amend claims 1, 3, 6, 7, 13, 16, 24, 26, 28 and 32 as follows.

1. (Currently Amended) An antenna arrangement comprising:

at least two antennas for providing radio coverage to a plurality of user equipment in a predetermined area of a mobile communications network, the at least two antennas being arranged to have different vertical properties to thereby provide at least two different areas of radio coverage within the predetermined area, and there being provided a plurality of frequencies for use in the predetermined area;

wherein the antenna arrangement is configured to ~~adjusting means for~~ dynamically adjust ~~adjusting~~ transmission properties of at least one of the antennas based on a distribution of users within the predetermined area ~~a cell~~ and frequency requirements for users within the predetermined area~~cell;~~, ~~and~~

~~allocating means for~~ to dynamically allocate ~~allocateing~~ at least one user equipment to at least one group associated with at least one of the at least two antennas based on link characteristics of a user equipment, and dynamically allocate at least one of said plurality of frequencies to said at least one group.

2. (Cancelled)

3. (Currently Amended) An antenna arrangement according to claim ~~2~~1, wherein the at least two groups correspond to a regular layer and super layer of an intelligent underlay-overlay arrangement.

4. (Cancelled)

5. (Cancelled)

6. (Currently Amended) An antenna according to claim ~~5~~1, wherein the plurality of frequencies correspond respectively to a set of regular frequencies and a set of super frequencies.

7. (Currently Amended) An antenna arrangement according to claim 6, further comprising an intelligent frequency hopping functionality provided between the regular frequencies ~~layer~~ and the super frequencies~~layer~~.

8. (Cancelled)

9. (Original) An antenna arrangement according to claim 1, wherein the vertical properties are different down-tilts.

10. (Original) An antenna arrangement according to claim 1, wherein the vertical properties are vertical antenna gain figures.

11. (Original) An antenna arrangement according to claim 1, wherein the vertical properties of at least one of said antennas is variable.

12. (Original) An antenna arrangement according to claim 11 wherein the vertical properties are variable based upon the distribution of user equipment within the predetermined area.

13. (Currently Amended) An antenna arrangement according to claim ~~8~~1, wherein the at least one of said plurality of ~~available~~ frequencies are allocated based upon a load in a group.

14. (Original) An antenna arrangement according to claim 13 wherein the load is dependent upon a number of mobile stations in the group.

15. (Original) An antenna arrangement according to claim 13 wherein the load is dependent upon an interference characteristics within the group.

16. (Currently Amended) An antenna arrangement according to claim ~~8~~1, wherein frequency allocation to at least one ~~antenna~~ group is dynamically controlled by the network.

17. (Original) An antenna arrangement according to claim 1, further comprising a channel which is allocated to the user equipment based on a carrier-to-interference measurement.

18. (Original) An antenna according to claim 17, wherein the channel is allocated based on a dynamic frequency and channel assignment.

19. (Original) An antenna arrangement according to claim 1, wherein the at least two different antennas provide radio coverage to the user equipment.

20. (Original) An antenna arrangement according to claim 19, wherein the user equipment is allocated to at least two groups.

21. (Original) An antenna arrangement according to claim 1, wherein a down-tilt of at least one of the antennas is fixed.

22. (Original) An antenna arrangement according to claim 1, wherein the predetermined area is a cell.

23. (Original) An antenna arrangement according to claim 1, wherein the predetermined area is a sector of a cell.

24. (Currently Amended) A method, comprising: ~~of controlling an antenna arrangement comprising at least two antennas for providing radio coverage to a plurality of user equipment in a predetermined area of a mobile communications network, the method comprising:~~

arranging at least two antennas to have different vertical properties to thereby provide at least two different areas of radio coverage within ~~the~~ a predetermined area;

providing a plurality of frequencies for use in the predetermined area;

dynamically adjusting transmission properties of at least one of the antennas based on a distribution of users within the predetermined area ~~a cell~~ and frequency requirements for users within the predetermined area~~cell~~; and

dynamically allocating each user equipment to at least one group associated with at least one of the at least two antennas based on link characteristics of a user equipment, and dynamically allocating at least one of said plurality of frequencies to said at least one group,

the method being used for controlling an antenna arrangement comprising at least two antennas for providing radio coverage to a plurality of user equipment in the predetermined area of a mobile communications network.

25. (Cancelled)

26. (Currently Amended) A method according to claim ~~25~~24, wherein the providing step comprises corresponding the at least two groups to a regular layer and super layer of an intelligent underlay-overlay arrangement.

27. (Cancelled)

28. (Currently Amended) A method according to claim 26, wherein the providing step comprises corresponding ~~a~~ the plurality of frequencies to a set of regular frequencies and a set of super frequencies, respectively.

29. (Original) A method according to claim 28, further comprising the step of providing an intelligent frequency hopping functionality between the regular layer and the super layer.

30. (Original) A method according to claim 24, wherein the arranging step comprises arranging the at least two different antennas to have different vertical properties, wherein the vertical properties of at least one of said antennas is variable.

31. (Original) A method according to claim 30, wherein the arranging step comprises arranging the at least two different antennas to have different vertical properties based upon the distribution of user equipment within the predetermined area.

32. (Currently Amended) A method according to claim 31, wherein the allocating step comprises allocating the at least one of said plurality of frequencies ~~an available frequency~~ based upon a load in a group.

33. (Original) A method according to claim 24, further comprising allocating a channel to the user equipment based on a carrier-to-interference measurement.

34. (Original) A method according to claim 33, wherein the channel allocating step comprises allocating based on a dynamic frequency and channel assignment.

35. (New) An antenna arrangement, comprising:

at least two antennas for providing radio coverage to a plurality of user equipment in a predetermined area of a mobile communications network, the at least two antennas being arranged to have different vertical properties to thereby provide at least two different areas of radio coverage within the predetermined area, and there being provided a plurality of frequencies for use in the predetermined area;

adjusting means for dynamically adjusting transmission properties of at least one of the antennas based on a distribution of users within the predetermined area and frequency requirements for users within the predetermined area; and

allocating means for dynamically allocating at least one user equipment to at least one group associated with at least one of the at least two antennas based on link characteristics of a user equipment, and for dynamically allocating at least one of said plurality of frequencies to said at least one group.